þÿ C o o p e r a t i v e n e s s A n e c e s s a r y t r a i t f o r i n t e r p r e on temperament and character dimensions of experts in different fields

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Cooperativeness – a necessary trait for interpreters? A study on temperament and character dimensions of experts in different fields

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Keywords:	consecutive interpreter, simultaneous interpreter, foreign language teacher, non-linguistic expert, temperament trait, character trait, cooperativeness
Abstract:	Aims and Objectives The aim of the present study was to investigate whether particular temperament and personality traits are more characteristic to interpreters' expert performance than to expert performance in other fields. Design To these ends, the Temperament and Character Inventory by Cloninger, Przybeck, Svrakic and Wetzel (1994) and the distractibility scale of the Revised Dimensions of Temperament Survey by Windle (1992) were used. Data and Analyses The data was gathered from two groups of interpreters (simultaneous and consecutive) and was compared to one group of foreign language teachers and one of non-linguistic experts from different fields of society. The group size varied between 20 to 23 participants each. The analyses were carried out with Manova, supplemented with Bonferroni corrected contrasts. Findings The results seem to indicate that temperament and character traits may have different impacts on different expert groups. In this study, in comparison to the control groups of foreign language teachers and non-linguistic experts, high cooperativeness was found to be more characteristic to simultaneous and consecutive interpreters. Cooperativeness also appears to be valued by recruiters and trainers of interpreters, for instance. Originality The study was the first one comparing interpreters' temperament and character dimensions with those of other expert groups, such as foreign language teachers and non-linguistic experts.

	Significance and Limitations Among the different temperament and personality traits, at least cooperativeness seems to have a connection to the abilities and skills needed in the profession of an interpreter. More research, however, is needed to reveal possible connections of various temperament and personality traits with expertise in different fields. In this particular case, additional studies could show whether individuals with high cooperativeness become more easily interested in such professions as interpreting, or whether the high cooperativeness is a result of more experience and expertise in interpreting.

Cooperativeness – a necessary trait for interpreters?

A study on temperament and character dimensions of experts in different fields

1. Introduction

The main objective of the present study was to assess the temperament and character traits of interpreters as a specialized group of experts. By definition, expert performance is "consistently superior performance on a specified set of representative tasks for a domain" (Ericsson and Smith, 1991). To achieve such expert performance, a minimum of ten years of continuous deliberate practice in a particular field is usually required (Ericsson and Lehman, 1996). As a result, experts differ from novices in several cognitive and psychological functions, as revealed by numerous studies; see, e. g., Feltovich, Prietula and Ericsson (2006), Ericsson and Lehmann (1996). Yet, it is still largely unknown if such cognitive or psychological differences are also reflected in the temperament or personality characteristics of experts.

Since the 1950's, numerous attempts have been made to define the characteristics of a good interpreter, beginning with inquiries and interviews with trainers, scholars and experienced professional conference interpreters (for a review, see, e.g., Russo, 2011), and studies on attitude and aptitude testing (see, e.g., Shaw, 2011; Rosiers, Eyckmans and Bauwens, 2011). For the most part, however, these studies have focused on linguistic, cognitive, and communicative skills, with personality-related traits, such as temperament and character, receiving less attention.

Hence, the main goal of the present study was to discover if there are differences in temperament and character between simultaneous and consecutive interpreters, or between them and other groups of experts. In this study, groups of foreign language teachers and a

mixed group of experts from different fields of society, called non-linguistic experts, served as control groups. To the best of our knowledge, this is the first time that temperament or other personality dimensions have been studied with groups of interpreters. The study constituted a part in a series of experiments on the memory and executive functions of the above-mentioned expert groups. The other experiments are reported in Hiltunen, Vik, Pääkkönen, and Krause (2016), for instance.

Interpreting between two languages is an expert performance which is characterized by the one-time presentation of the source text (usually spoken) and the immediate production of the target text (Shuttleworth and Cowie, 1997). The general idea is that the interpreter must repeat the utterance in another language so that the listener understands it as if it had originally been spoken in the listener's language, preferably with no additions, omissions, or interpretations (for an overall review, see, e.g., Pöchhacker, 2004; for models and errors in interpreting, see Gile, 2008). In simultaneous interpreting the time lag between incoming source text and spoken target text is very short: 2 to 3 seconds or 4 to 5 words (see, e.g., Christoffels & De Groot, 2004; Treisman, 1965). In contrast, in consecutive interpreting the target text is produced only after the speaker has paused or completed his or her utterance (see Pöchhacker, 2004, for more details).

What, then, characterizes a good interpreter in terms of personality? Interviews with trainers, scholars and experienced professional conference interpreters, repeatedly mention such characteristics as the ability to adapt to speakers or to work as a team member (for a review, see, e.g., Russo, 2011). In addition, suggestions for aptitude testing mention such factors as curiosity, self-confidence, persistence, engagement and goal setting (see, e.g., Shaw, 2011). Furthermore, in an overall description of the qualities

and abilities expected of a prospective conference interpreter by the AIIC Training Committee (2010), a friendly and collegial attitude is recommended.

Apart from such recommendations, a few studies addressing cognitive abilities, as well as personality and affective factors, have been published recently. Rosiers et al. (2011), for example, compared interpreting and translation students by investigating communication competence and motivation and their possible connections to interpreting (translating) skills. The results indicated that the interpreting students considered themselves highly communicative and fluent in comparison to the translation students, while there were no differences in motivation between the groups. Furthermore, no connection was found between these characteristics and the sight translation ability used as an indicator of translation skills.

Nonetheless, more comprehensive and validated studies of the temperament and/or personality dimensions of experienced interpreters seem to be absent. To clarify the concept we can say that temperament describes the *how* of behavior in contrast to the *what* and *why* of behavior, which are more related to ability and motivation, respectively (Thomas and Chess, 1977). Temperament traits are thought to form a basis for personality development. According to an extensive review by Strelau (1998), temperament is more closely related to biology, and it is postulated to be present from early childhood, whereas personality is more strongly affected by social factors and emerges later as a result of socialization and learning. Still, a certain level of heritability has been found for both personality (see, e.g., Jang, Livesley and Vernon, 1996) and temperament and character dimensions (see, e.g., Ando, Suzuki, Yamagata, Kijima, Maekawa, Ono and Jang, 2004).

For the current study, the Temperament and Character Inventory (TCI) developed by Cloninger, Przybeck, Svrakic and Wetzel (1994) was chosen as a tool. According to Cloninger et al. (1994), temperament traits reflect biases in automatic responses to emotional stimuli, whereas character traits depict differences in the higher cognitive functions underlying an individual's goals and values. In short, temperament involves involuntary emotional processes as opposed to the voluntary rational processes of character. Temperament and character are thought to interact dynamically in the development of personality across the lifespan (Cloninger, 2008). Bearing this in mind, training and the acquisition of expertise in the field of interpreting might help this development even further and might be reflected in differences between interpreters and other experts. The TCI inventory has been successfully utilized in studying multiple topics, also including many physiological health issues, such as a rare cardiac disorder (Määttänen, Hintsa, Toivonen, Swan, Pulkki-Råback, Hintsanen, Kontula and Keltikangas-Järvinen, 2011).

The temperament dimensions in the TCI are novelty seeking (a bias toward initiation of behaviours, such as exploratory activity, in response to novelty), harm avoidance (a bias to respond intensely to aversive stimuli and inhibit behaviours), reward dependence (a tendency to respond intensely to social approval), and persistence (perseverance despite frustration and fatigue) (Cloninger et al., 1994). The three character dimensions (self-directedness, cooperativeness, and self-transcendence) reflect an individual's self-concept and object relations. Self-directedness (with the subscales responsibility, purposefulness, resourcefulness, self-acceptance, and enlightenment) refers to the extent to which a person identifies the self as an autonomous individual. Cooperativeness expresses empathy and identification with other people and includes the following subscales: social acceptance, empathy, helpfulness, compassion and pure-heartedness. Self-transcendence involves self-awareness of being an

integral part of the unity of all things (subscales: self-forgetfulness, transpersonal identification, spiritual acceptance).

In addition to the TCI scales, the present study used one scale (distractibility) included in the Revised Dimensions of Temperament Survey (DOTS-R, Windle, 1992). Distractibility is thought to measure the tendency to be easily distracted and to shift the perceptual focus.

2. Present study[1]

2.1 Methods

Participants

Eighty-six of the participants in the free recall test with words reported in Hiltunen et al. (2016) completed the temperament inventory. The participants were present individually for the free recall test and filled in the form with the temperament and character scales after the test. Each of them had agreed to the experiments by e-mail before the experiments were started[2].

The participants consisted of four groups of experts: three groups of foreign language experts and one group of non-linguistic experts. The latter group (n = 23; 18 female, 5 male) had not used any foreign language as a second language at a professional level. They were occupied in management and clerical work, manufacturing industries, health care, and education. The three foreign language expert groups were: simultaneous (n = 21, all female) and consecutive (n = 20; 18 female, 2 male) interpreters and foreign language teachers (n = 22; 21 female, 1 male).

The minimum educational level of all participants was B.A. or equivalent, and their minimum professional experience was over 10 years, to meet the requirements of expertised knowledge in

the field (see Ericsson and Lehman, 1996). The participants' mean age was 47.3 years (SD 7.14; range 26–63) and mean experience 17.71 years (SD 7.84; range 3–40). There were no significant differences between the four groups as regards age ($F(3,81) = 1.90$, $p = .14$) or length of professional experience ($F(3,81) = .71$, $p = .55$). For more details, see Hiltunen et al. (2016), especially Tables 1 and 2.

Temperament scales

Self-reported information on temperament was gathered from the participants using two different measures: version 9 of the TCI (Cloninger et al., 1994) and one scale (distractibility) from the Revised Dimensions of Temperament Inventory (DOTS-R; Windle, 1992). The TCI temperament dimensions include harm avoidance (35 items, Cronbach's $\alpha = 0.92$), novelty seeking (40 items, $\alpha = 0.85$), reward dependence (24 items, $\alpha = 0.80$), and persistence (8 items, $\alpha = 0.64$). The TCI character dimensions include self-directedness (44 items, $\alpha = 0.89$), cooperativeness (42 items, $\alpha = 0.91$), and self-transcendence (33 items, $\alpha = 0.91$). The distractibility scale in the DOTS-R includes five items about the tendency to be distracted and to easily shift one's perceptual focus, with a Cronbach's alpha reliability $\alpha = .71$. All items were rated on a five-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

2.2 Analyses and results

The sex-controlled means of the TCI scales and the DOTS-R distractibility scale by group with between-group p values are shown in Tables 1 and 2. The between-group differences were analyses by MANOVA with the criterion for statistical significance at $p = .05$. The results revealed no significant between-group effects for any of the temperament dimensions, for the between-group significance values: $F(3,81) = .54$, $p = .66$, $\eta_p^2 = .02$ for novelty seeking, $F(3,81) = 2.03$, $p = .12$, $\eta_p^2 = .07$ for harm avoidance, $F(3,81) = 1.95$, $p = .13$, $\eta_p^2 = .07$ for reward

dependence, F (3,81) = .01, p =.99, η_p^2 =.00 for persistence, and F (3,81) = .67, p =.58, η_p^2 =.02 for distractibility, respectively.

Table 1 approximately here.

As to the character dimensions of the TCI, there was a significant between-group difference in cooperativeness (F (1,82) = 3.92, p =.01, η_p^2 =.13). The between-group differences for the other two character dimensions did not reach significance: F (1,82) = 1.66, p =.18, η_p^2 =.06 for self-directedness, and F (1,82) = 1.02, p =1.02, η_p^2 =.39 for self-transcendence, respectively. The Bonferroni corrected contrast analyses demonstrated that the significant group effect was due to both interpreter groups. Compared to the non-linguistic group, the significance values were as follows: p =.01 for simultaneous interpreters, p =.04 for consecutive interpreters, and p = .09 for teachers.

In addition, to gain more information on this particular character dimension, the subscales of cooperativeness were analysed. Significant between-group differences were revealed especially in social acceptance (F (1,82) = 3.18, p =.03, η_p^2 =.10) and in helpfulness (F (1,82) = 3.96, p =.01, η_p^2 =.13). For the other subscales, the between-group differences did not reach significance, see Table 2. Compared to the non-linguistic experts, the Bonferroni corrected contrast analyses indicated significant differences for the interpreter groups as follows: in social acceptance for the consecutive interpreters (p =.004) and in helpfulness for the simultaneous interpreters (p =.02) (for more details, see Table 2).

Table 2 approximately here.

3. Discussion

The present study addressed temperament and character dimensions of simultaneous and consecutive interpreters as compared to foreign language teachers and non-linguistic experts. The main finding of the study was that both interpreter groups exhibited higher cooperativeness than the non-linguistic experts, while the other temperament and character dimensions of the TCI and DOTS-R scales indicated no between-group differences. The result could be explained by the inherent characteristics of the interpreters' work: a high cooperativeness, especially as revealed by the subscales social acceptance, empathy, and helpfulness, is highly valued in the interpreter's profession, as indicated by interviews with trainers, scholars and experienced professional conference interpreters (for a review, see, e.g., Russo, 2011, as well as recommendations by the AIIC Training Committee (2010)).

A closer look at the analysis of the subscales of cooperativeness also revealed differences between the two groups of interpreters. Compared to the non-linguistic experts, the simultaneous interpreters showed higher helpfulness, and the consecutive interpreters higher social acceptance. This difference between the two interpreter groups seems understandable, too. Most of the consecutive interpreters in the present study were employed as community or court interpreters whose work requires a high social acceptance (understood as tolerance of diversity) of their customers, such as immigrants or refugees with cultures and languages very different from those commonly encountered in Finland.

On the other hand, simultaneous interpreters work in conferences and seminars, as well as business negotiations where conflicts might have to be resolved. In these situations, a high helpfulness is highly valued, as confirmed in inquiries to professional interpreters and scholars about the most important skills of a professional interpreter (see, e.g., Russo, 2011, for a

review). According to the inquiries, social skills, such as the capacity to adapt to a subject, speakers, etc., and the ability to work as a team member, are mentioned repeatedly. In addition, a user-friendly attitude with constant mindfulness of the audience's specific needs, good booth manners and helpfulness toward colleagues are also emphasized by the recruiters of simultaneous interpreters (Viaggio, 1996).

The present results, however, do not reveal anything about the causality of the interpreters' high cooperativeness. It may be that individuals with high cooperativeness become more easily interested in professions like interpreting. Previously, Sheikh, Shaker, Hussein and Ramy (2014) have found that temperament and character dimensions did have an impact on the area of specialization chosen by Egyptian medical school students. For instance, students choosing patient-centered specialities showed higher reward dependence, persistence, and cooperativeness. On the other hand, cooperativeness may increase with more experience and expertise in interpreting, especially for individuals who find their work rewarding enough that they are prepared to invest in continuous improvement of their skills. According to Wong and Cloninger (2010), character refers to individual differences in a person's goals and values that develop step by step as a person matures in insight through experience over his or her lifespan. It is possible that, due to the continuous deliberate practice in the profession, the cooperativeness of interpreters develops even more markedly than in other fields of expertise.

To sum up: an inclination towards cooperativeness may steer a person with a practical interest in languages towards interpreting, but equally, the cooperativeness of those who opt for it will naturally develop, even though it is not a specific topic in interpreter education or training in Finland, as far as we know. It is also true that people who have given up an interpreting career are not represented in this study, and we do not know what part the requirement for

cooperativeness played in their decision (though such factors as uneven work flow and irregular working hours would probably have a greater impact). These questions remain to be assessed by future studies.

4. Conclusions

The main finding of the present study seems to confirm that temperament and character traits may have a different impact on different expert groups; in this case, both interpreter groups showing significantly higher cooperativeness than the non-linguistic experts. As cooperativeness appears to be valued by recruiters of interpreters and by the AIIC Training Committee (2010), for instance, the present study suggests that studying personality characteristics as one part of expert performance is worthwhile. More research, however, is needed to reveal possible connections between different temperament and personality traits and expertise in different fields. Differences in the traits between expert groups can affect the choice of professional occupation, for example, or innate capacities can develop to a higher level through expertise. In addition, as the present findings relate to participants with Finnish as native language and a minimum of ten years of expert experience, studies among other nationalities and interpreters with several other languages are recommended to allow any meaningful generalizations.

5. Future directions

This study was the first attempt to assess the temperament and character dimensions of interpreters. More studies are needed, perhaps with the TCI scales used here but with other expert groups, or with interpreters but using different temperament and/or personality scales. Of special interest could be studies on other groups of language experts, such as translators or sign language interpreters. One could also study groups of interpreters divided not according to

whether they work consecutively or simultaneously, but according to the settings they work in, whether conference, community or court interpreting, to mention a few. This might reveal that the requirements for or manifestations of cooperativeness vary according to setting. In addition to the study of temperaments/personality, it might prove useful to look more closely at the capability to adapt to varying situations, even to the point of suppressing one's personal opinions and knowledge, which is often required of interpreters. All of these might also conceivably produce different results depending on the specific characteristics of different societies. Provided that enough comprehensive, high-quality research on the temperament and/or personality traits, as well as the adaptation ability of interpreters and other linguistic experts can be amassed, it might contribute to their aptitude testing or even training, either within regular and permanent programs or especially in situations where short-term interpreter training is urgently needed.

In addition, as practically all of the interpreter and teacher participants in this study were late bilinguals, which may have had some impact on both the results and how they were interpreted, repeating the same inquiry with early bilinguals working in a range of non-linguistic professions would be recommended. This might shed some light on whether cooperativeness develops parallel with bilingualism and steers people towards specific professions, or whether cooperativeness is simply enhanced with the developing expertise in a particular field.

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Table 1. Sex-controlled means by group, with standard deviations and *p* values of TCI (Cloninger et al., 1994) and DOTS-R (Windle, 1992) temperament and character dimensions.

Temperament dimensions	Simulta-neous interpreters *n* = 21	Consecutive interpreters *n* = 20	Foreign language teachers *n* = 22	Non-linguistic experts *n* = 23	Total *n* = 86	betw-group *p* value*
	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SD)	
TCI (Cloninger)						
Novelty seeking (NS)	2.77 (0.29)	2.82 (0.28)	2.64 (0.28)	2.76 (0.15)	2.75 (0.08)	.647
Harm avoidance (HA)	2.67 (0.32)	2.34 (0.32)	2.55 (0.32)	2.67 (0.18)	2.56 (0.15)	.113
Reward dependence (RD)	3.30 (0.23)	3.22 (0.23)	3.25 (0.23)	3.11 (0.12)	3.22 (0.08)	.124
Persistence (P)	3.20 (0.43)	3.18 (0.43)	3.24 (0.42)	3.23 (0.23)	3.21 (0.03)	.998
Self-directedness (SD)	4.00 (0.29)	3.76 (0.29)	3.92 (0.29)	3.76 (0.16)	3.86 (0.12)	.182
Cooperativeness (CO)	3.86 (0.24)	3.84 (0.24)	3.79 (0.23)	3.58 (0.13)	3.77 (0.13)	**.011**
Self-transcendence (ST)	1.80 (0.47)	2.27 (0.47)	2.02 (0.46)	2.22 (0.25)	2.08 (0.21)	.389
DOTS-R (Windle)						
Distractibility	3.03 (0.42)	2.83 (0.42)	2.83 (0.41)	3.02 (0.23)	2.93 (0.11)	.576

* *p* values of between-group differences.

Table 2. Subscales of Cooperativeness: means with (SE) by group and *p* values of between-group differences

Cooperativeness (CO)	Simulta-neous interpreters *n* = 21	Consecutive interpreters *n* = 20	Foreign language teachers *n* = 22	Non-linguistic experts *n* = 23	Total *n* = 86	betw-group *p* value
Social acceptance (C1)	4.05 (0.41)	4.14 (0.35)	3.95 (0.51)	3.75 (0.45)	3.97 (0.45)	.028
contrast *p* values*	=.11	**=.02**	=.5			
Empathy (C2)	3.87 (0.36)	3.78 (0.48)	3.88 (0.40)	3.63 (0.50)	3.79 (0.44)	.221
contrast *p* values*	=.31	=1	=.27			
Helpfulness (C3)	4.18 (0.33)	4.07 (0.41)	4.02 (0.40)	3.76 (0.54)	4.00 (0.45)	**.011**
contrast *p* values*	**=.004**	=.08	=.18			
Compassion (C4)	4.19 (0.40)	4.08 (0.41)	4.07 (0.55)	3.85 (0.64)	4.04 (0.52)	.167
contrast *p* values*	=.12	=.58	=.62			
Pure-hearted (C5)	4.14 (0.34)	4.16 (0.50)	4.10 (0.56)	3.80 (0.61)	4.04 (0.53)	.073
contrast *p* values*	=.12	=.09	=.23			
Cooperativeness (CO)	3.86 (0.24)	3.84 (0.24)	3.79 (0.23)	3.58 (0.13)	3.77 (0.13)	**.011**
contrast *p* values*	**=.01**	**=.04**	=.09			

* *p* values of Bonferroni corrected contrasts of three foreign language groups compared to non-linguistic group